

IN THE CLAIMS

1. (canceled)
2. (currently amended) A method of screening for therapeutic agents useful in the treatment of a cardiovascular disease in a mammal, comprising steps of:
 - i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
 - ii) determining the activity of said polypeptide at a different concentration of said test compound; and
 - iii) determining whether the test compound has an effect on a symptom of the cardiovascular disease in an *in vivo* assay identifying said test compound as a potential therapeutic agent useful in the treatment of the cardiovascular disease if it modulates the activity of the PDE10A polypeptide.
- 3-26. (canceled)
27. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease selected from the group consisting of cancer, liver diseases; diabetes; and kidney diseases in a mammal, comprising steps of
 - i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
 - ii) determining the activity of said polypeptide at a different concentration of said test compound; and
 - iii) determining whether the test compound has an effect on a symptom of the disease in an *in vivo* assay identifying said test compound as a potential therapeutic agent

useful in the treatment of the disease if it modulates the activity of the pDE10A polypeptide.

28. (currently amended) A method of screening for therapeutic agents useful in the treatment of Alzheimer's disease, comprising steps of

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) determining whether the test compound has an effect on a symptom of the Alzheimer's disease in an *in vivo* assay identifying said test compound as a potential therapeutic agent useful in the treatment of the disease if it modulates the activity of the pDE10A polypeptide.